UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,849	02/15/2001	Antony Heatwole	PD-200219	2619

7590   01/13/2005

Hughes Electronics Corporation
Patent Docket Administration
Bldg. 1, Mail Stop A109
P.O. Box 956
El Segundo, CA 90245-0956

EXAMINER
MEW, KEVIN D

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No. 09/783,849	Applicant(s) HEATWOLE ET AL.	
	Examiner Kevin Mew	Art Unit 2664	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _23 September 2004_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-3,5,7-13,15,17-23,25,27-33,35 and 37-44_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) _1-3,5,7-13,15,17-23,25,27-33,35 and 37-42_ is/are allowed.

6)☒ Claim(s) _43 and 44_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _4_.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

Response to Amendment

1.   Applicant's arguments/remarks filed on 9/23/2004 regarding claims 1-3, 5, 7-13, 15, 17-

23, 25, 27-33, 35, 37-44 have been fully considered.   Claims 4, 6, 14, 16, 24, 26, 34, 36 have

been cancelled by the Applicant.

2.   Acknowledgement is made of the inclusion of the missing reference numeral 211 in the

specification cited in the objection to the drawings in the previous Office Action. The objection

to the drawings is now withdrawn.

3.   Acknowledgement is made of the amended claims 12, 16, 39, 47, 50 in regards to the

deficiencies cited in the objection to the abstract in the previous Office Action. The corrections

are acceptable and the objection to the specification regarding these deficiencies is now

withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 43-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Struhsaker et

al. (USP 6,434,129).

Regarding claims 43 and 44, Struhsaker discloses an apparatus to perform the method for

providing bandwidth apportionment (see col. 16, lines 60-67 and col. 17, lines 1-7), the

method comprising:

receiving a bandwidth request from one of a plurality of terminals for capacity

(bandwidth request for one of the CDMA channels, see Fig. 9);

determining whether the bandwidth request specifies a capacity portion parameter

including a group partition, a group sub-partition, or an un-allocated portion (the bandwidth

request specifies a parameter field indicating whether the request is an access request or data

service request; note that access request including the group partition of base control/subscriber

call access, Fig. 9); and

apportioning bandwidth capacity to satisfy the bandwidth request based on the capacity

portion parameter using a multi-phase allocation scheme to permit servicing of overflow traffic

from the one terminal (dynamic pool sizing for allocating different number of channels in each

pool according to the system traffic demands and user traffic demands, see col. 16, lines 60-67

and col. 17, lines 1-7), wherein the multi-phase allocation scheme (base pilot/subscriber Tx

acquisition is interpreted as phase 1, base control/subscriber call access is interpreted as phase 2,

alternative service pool is interpreted as phase 3, traffic channel pool is interpreted as phase 4,

see Fig. 9) sequentially allocates the capacity on a sub-group basis, a group basis, and un-

allocated partition basis, respectively (allocation scheme in which capacity is allocated

sequentially on the CDMA channels on the group partition, subgroup partition and idle traffic

channels; note that group basis are the level comprising the partitions of base pilot/subscriber Tx

acquisition, base control/subscriber/call access, alternative service pool and traffic channel pool

while the subgroup basis are the level of embedded packet, mirco-channel bank, system

shutdown/enable and the unallocated basis are the level of idle traffic channels, see col. 4, lines

2-5, col. 16, lines 60-67, col. 17, lines 1-7 and Fig. 9).

Response to Arguments

5.   Applicant's arguments filed on 9/23/2004 have been fully considered but the arguments

regarding claims 43 and 44 are not persuasive.

In response to the Applicant's arguments that the prior art of record fails to show certain

features of applicant's invention, it is noted that the features upon which applicant relies (i.e.

"receiving a bandwidth request from one of a plurality of terminals for capacity", "determining

whether the bandwidth request specifies a capacity partition parameter including a group

partition, a group sub-partition, or an un-allocated partition and apportioning bandwidth capacity

to satisfy the bandwidth request based on the capacity partition parameter using a multi-phase

allocation scheme to permit servicing of overflow traffic from the one terminal, wherein

the multi-phase allocation scheme sequentially allocates the capacity on a sub-group

basis, a group basis, and un-allocated partition basis, respectively"), it is noted that these features

are indeed disclosed by Struhsaker.

In particular, Struhsaker discloses apportioning bandwidth capacity to satisfy the

bandwidth request based on the capacity portion parameter using a multi-phase allocation

scheme to permit servicing of overflow traffic from the one terminal (dynamic pool sizing for

allocating different number of channels in each pool according to the system traffic demands and

user traffic demands, see col. 16, lines 60-67 and col. 17, lines 1-7), wherein the multi-phase

allocation scheme (base pilot/subscriber Tx acquisition is interpreted as phase 1, base

control/subscriber call access is interpreted as phase 2, alternative service pool is interpreted as

phase 3, traffic channel pool is interpreted as phase 4, see Fig. 9) sequentially allocates the

capacity on a sub-group basis, a group basis, and un-allocated partition basis, respectively

(allocation scheme in which capacity is allocated sequentially on the CDMA channels on the

group partition, subgroup partition and idle traffic channels; note that group basis are the level

comprising the partitions of base pilot/subscriber Tx acquisition, base control/subscriber/call

access, alternative service pool and traffic channel pool while the subgroup basis are the level of

embedded packet, mirco-channel bank, system shutdown/enable and the unallocated basis are the

level of idle traffic channels, see col. 4, lines 2-5, col. 16, lines 60-67, col. 17, lines 1-7 and Fig.

9). Therefore, claims 43 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by

Struhsaker et al.

Allowable Subject Matter

6.   Claims 1-3, 5, 7-13, 15, 17-23, 25, 27-33, 35, 37-42 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

In claim 1, a method of allocating system capacity to a plurality of terminals in a communication switching system, the method comprising:

receiving a bandwidth request message from one of the terminals, the one terminal being configured to submit the bandwidth request message that selectively requests capacity from the provisioned portion and the unprovisioned portion based upon a type of traffic received by the one terminal; allocating the provisioned portion of the capacity to the plurality of sub-pools of the terminals, the provisioned portion of the capacity being arranged into sub-partitions, wherein one of the sub-partitions is not associated with the sub-pools of terminals, and remaining sub-partitions are associated with the sub-pools of terminals; selectively allocating available capacity from the sub-partitions to one of the sub-pool terminals to permit overflow of traffic from the one sub-pool terminal, and selectively allocating the unprovisioned portion of the capacity to the pool to permit overflow of traffic from a terminal within the pool and to a terminal that is not a part of the pool of terminals.

In claim 41, a method for supporting apportionment of bandwidth among a plurality of terminals, the apparatus comprising:

receiving a bandwidth request from one of the terminals for capacity, wherein the capacity includes a provisioned portion and an unprovisioned portion, and a portion of the terminals are designated as a pool that includes a plurality of sub-pools,

the provisioned portion being allocated to the sub-pools and being arranged into sub-partitions, wherein one of the sub-partitions is not associated with the sub-pools and another one of the sub-partitions is associated with the sub-pools; and

allocating available capacity from the sub-partition to one of the sub-pools including the one terminal to permit overflow of traffic based on the bandwidth request, wherein the provisioned portion is allocated to the pool for overflow of traffic for any one of the terminals.

In claim 42, an apparatus for supporting apportionment of bandwidth among a plurality of terminals, the apparatus comprising:

means for receiving a bandwidth request from one of the terminals for capacity, wherein the capacity includes a provisioned portion and an unprovisioned portion, and a portion of the terminals are designated as a pool that includes a plurality of sub-pools, the provisioned portion being allocated to the sub-pools and being arranged into sub-partitions, wherein one of the sub-partitions is not associated with the sub-pools and another one of the sub-partitions is associated with the sub-pools; and

means for allocating available capacity from the sub-partition to one of the sub-pools including the one terminal to permit overflow of traffic based on the bandwidth request, wherein the provisioned portion is allocated to the pool for overflow of traffic for any one of the terminals.

7.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Kevin Mew whose telephone number 571-272-3141. The
examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the
organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent
Application Information Retrieval (PAIR) system. Status information for published applications
may be obtained from either Private PAIR or Public PAIR. Status information for unpublished
applications is available through Private PAIR only. For more information about the PAIR
system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR
system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KDM
Art Unit 2664